Ocean Temperatures Student Activity Book

I. Introduction

Air temperature and sea surface temperature (SST) vary from season to season and with latitude. A location at 60° N latitude (Alaska) is much colder than one at 17° N latitude (Hawaii). The lower the latitude, the higher the temperature. Around the equator (latitude = 0) is the warmest latitude. Temperatures in areas that are near the water tend to be warmer than areas far away from water. The sea water helps to keep the land temperatures nearby warmer. During the year, air and SST warm and cool gradually. They are hottest in the summer and the coldest in the winter. This is, of course, for the northern hemisphere. In the southern hemisphere it is cold in June and warm in December.

Get Info Objectives

1. Explain what causes seasons.
2. List data collected by marine buoys.
3. Describe how data is transmitted worldwide.
4. Explain the difference between near-shore and offshore air and water temperatures.

Interpret Data Objectives

1. Collect information about marine buoy sites.
2. Record latitude and longitude of sites.
3. List times of most recent observations.
4. Read tables of current data and record information.
5. Interpret graphs of air and sea surface temperatures (SST).
6. Calculate the differences in temperatures of locations at different latitudes.
7. Collect data over the period of one week at a site closest to school and create a graph of the data.

Application Objectives

1. Predict air temperature changes based on past and current data.
2. Predict SST temperature changes based on past and current data.
3. Correlate air and SST to the effects of El Nino nationwide and locally.

- From the main screen, click "Get Info."